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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,866

02/06/2006

Pierre Vincent

05-660

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BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

ROBINSON, RYAN C

ART UNIT

PAPER NUMBER

2614

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,866	<b>Applicant(s)</b> VINCENT, PIERRE	
	<b>Examiner</b> Ryan Robinson	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/11/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 11-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azima et al, U.S. Patent No. 6,332,029, published on 12/18/2001 (hereby Azima), Dolby Laboratories Inc., "Dolby Stereo Technical Guidelines for Dolby Stereo Theatres" (hereby Dolby), published November 1994, further in view of Jacobson et al., U.S. Patent No. 5,109,423, published on 4/28/1992, (hereby Jacobson).**

3. As to claim 11, Azima discloses a movie theater system for the projection of cinematographic works or digital works with sound with at least one sound channel (Figs. 55-57), comprising: a theater having a back wall (145); a screen (114, 115, 32) spaced from said back wall; at least one sound channel comprising at least one woofer (35) and at least one medium/treble speaker (9); the screen being a non-perforated screen (The outer layer is a film; Col. 46, lines 47-48); the at least one medium/treble speaker (9) comprising a flat sound transducer (9) placed against the screen to a rear thereof in relation to a direction of projection. It is noted that Azima does not explicitly

Art Unit: 2614

disclose a plate of sound-absorptive material disposed between the wall and the screen, and an extreme treble speaker being disposed on a periphery of the screen. However, such extra features were already known in the art of movie theater audio. Dolby discloses a plate of sound-absorptive material disposed between the wall and the screen (Page 38, lines 33-35). Therefore, it would have been obvious, at the time of Applicant's invention, to provide a plate of sound-absorptive material behind the wall and the screen, as a design choice, and use of a known technique for the added feature of minimizing sound reflections (Dolby: Page 38, lines 8-9). It is noted that Azima or Dolby do not explicitly disclose an extreme treble speaker disposed on a periphery of the screen. However the use of extreme treble speakers to extend the frequency range of an overall audio system in a movie theater was well known. Jacobson discloses extreme treble speakers (7) disposed on a periphery of the screen (10). Therefore, it would have been obvious to one of ordinary skill, at the time of Applicants invention, to provide extreme treble speakers disposed on a periphery of the screen, as a design choice, to increase the frequency range for the overall system.

4. As to claim 12, Azima, Dolby and Jacobson remain as applied above. Azima further discloses that the medium/treble transducer (9) is disposed substantially above the at least one woofer (35).

5. As to claim 13, Azima, Dolby and Jacobson remain as applied above. Jacobson further teaches that the extreme treble speaker (7) is disposed above the screen and

Art Unit: 2614

substantially above the transducer (The treble speakers are at the very top of the screen).

6. As to claim 14, Azima, Dolby and Jacobson remain as applied above. Azima further discloses at least two lateral channels (See Fig. 55), and Jacobson teaches a pair of extreme treble speakers (7) for the at least two lateral channels disposed on either side of the screen.

7. As to claim 15, Azima, Dolby and Jacobson remain as applied above. Azima, Dolby and Jacobson do not explicitly teach that the extreme treble speakers of the at least two lateral channels are disposed substantially at a height of a plurality of flat transducers of corresponding channels. However, Jacobson does teach that the optimal orientation of the extreme treble speakers can be changed. Examiner takes official notice that it would not have been beyond the capabilities of ordinary skill to place the speakers at the same level of the flat transducers for an optimal acoustical effect. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention, to place the extreme treble speakers of the at least two lateral channels substantially at a height of a plurality of flat transducers of corresponding channels, since one of ordinary skill could have pursued the known, finite number of potential solutions with the reasonable expectation of success.

Art Unit: 2614

8. As to claim 16, Azima, Dolby and Jacobson remain as applied above. Azima further discloses comprising two lateral channels (See Fig. 55), and Jacobson teaches that the extreme treble speakers (7) for the lateral channels being disposed above the screen (10).

9. As to claim 17, Azima, Dolby and Jacobson remain as applied above. Jacobson, when combined with Azima and Dolby, teaches that the extreme treble speakers (7) of the lateral channels are disposed substantially above the flat (Azima) transducers of the corresponding channels (The treble speakers are at the very top of the screen).

10. As to claim 18, Azima, Dolby and Jacobson remain as applied above. Jacobson further a central high channel (See Fig. 6), in which an extreme treble speaker (7) of the central-high channel is disposed above the screen (10). It is noted that Azima, Dolby and Jacobson do not explicitly disclose two lateral channels, and a central-low channel, and an extreme treble speaker of the central-low channel is disposed under the screen. Examiner takes official notice that it would have not been beyond the capabilities of ordinary skill to simply provide another high frequency channel and speaker, in order to gain more output from the system. Therefore, it would have been obvious to one of ordinary skill, at the time of Applicant's invention, to provide an additional central-low channel, with another extreme treble speaker disposed under the screen, to achieve the predictable result of greater output and high frequency coverage.

Art Unit: 2614

11. As to claim 19-20, Azima, Dolby and Jacobson remain as applied above. Azima, Dolby and Jacobson are silent as to exact frequency ranges of the transducers, specifically the woofers around 300 Hz to 800 Hz and the extreme treble speaker being arranged to produce sounds with a frequency that is higher than around 3 kHz to 5kHz. Examiner takes official notice that providing a suitable frequency range in a speaker system would have been well known. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of Applicant's invention to adjust speaker parameters for a desired frequency range, including the woofers around 300 Hz to 800 Hz, and extreme treble speakers greater than about 4 KHz, as a design choice.

12. As to claim 21, Azima, Dolby and Jacobson remain as applied above. Dolby further discloses that the plate of sound-absorptive material is disposed against the back wall (Page 38, lines 33-35).

### ***Conclusion***

The prior art made of record

- |    |                       |  |
|----|-----------------------|--|
| a. | US Patent Number      | 6,332,029  |
| b. | Non Patent Literature | "Technical Guidelines for Dolby Stereo Theatres" |
| c. | US Patent Number      | 5,109,423  |

Art Unit: 2614

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan C. Robinson whose telephone number is (571) 270-3956. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/R. R./

Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614